What is claimed is:

1. A method of providing a data output signal, comprising:

generating a first temperature-dependent control signal having a first logic level when the ambient temperature is at or above a first predetermined threshold and having a second logic level when the ambient temperature is below the first predetermined threshold;

generating a first output signal at a first output buffer stage in response to a data signal;

generating a second output signal at a second output buffer stage in response to the data signal when the first temperature-dependent control signal has the first logic level;

placing the second output buffer stage in a high-impedance state when the first temperature-dependent control signal has the second logic level; and

adding the first output signal and the second output signal to generate the data output signal.

2. The method of claim 1, wherein generating a first temperature-dependent control signal further comprises:

altering characteristics of a temperature-dependent voltage generator by adjusting a threshold voltage of a floating-gate field effect transistor, wherein an output of the temperature-dependent voltage generator is a voltage signal having a proportionality to the ambient temperature;

comparing the output of the temperature-dependent voltage generator to a reference voltage;

generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the output of the temperature-dependent voltage generator, wherein the first temperature-dependent control

signal has the first logic level when the output of the temperature-dependent voltage generator is greater than or equal to the reference voltage and wherein the first temperature-dependent control signal has the second logic level when the output of the temperature-dependent voltage generator is less than the reference voltage.

3. The method of claim 2, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the output of the temperature-dependent voltage generator further comprises generating the first temperature-dependent control signal to have the first logic level when the output of the temperature-dependent voltage generator is equal to the reference voltage.

4. The method of claim 1, wherein generating a first temperature-dependent control signal further comprises:

generating a first temperature-dependent voltage signal having a proportionality to the ambient temperature;

comparing the first temperature-dependent voltage signal to a reference voltage;

generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal, wherein the first temperature-dependent control signal has the first logic level when the first temperature-dependent voltage signal is greater than the reference voltage and wherein the first temperature-dependent control signal has the second logic level when the first temperature-dependent voltage signal is less than the reference voltage.

5. The method of claim 4, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal further comprises generating the first temperature-dependent

control signal to have the first logic level when the first temperature-dependent voltage signal is equal to the reference voltage.

6. The method of claim 4, further comprising:

amplifying the first temperature-dependent voltage signal prior to comparing it to the reference voltage.

7. The method of claim 1, wherein generating a first temperature-dependent control signal further comprises:

generating a first temperature-dependent voltage signal having an inverse proportionality to the ambient temperature;

comparing the first temperature-dependent voltage signal to a reference voltage;

generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal, wherein the first temperature-dependent control signal has the first logic level when the first temperature-dependent voltage signal is less than the reference voltage and wherein the first temperature-dependent control signal has the second logic level when the first temperature-dependent voltage signal is greater than the reference voltage.

8. The method of claim 7, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal further comprises generating the first temperature-dependent control signal to have the first logic level when the first temperature-dependent voltage signal is equal to the reference voltage.

9. The method of claim 1, further comprising:

generating a second temperature-dependent control signal having the first logic level when the ambient temperature is at or above a second predetermined threshold

and having the second logic level when the ambient temperature is below the second predetermined threshold, the second predetermined threshold being higher than the first predetermined threshold;

generating a third output signal at a third output buffer stage in response to the data signal when the second temperature-dependent control signal has the first logic level;

placing the third output buffer stage in a high-impedance state when the second temperature-dependent control signal has the second logic level; and

adding the third output signal to the first and second output signals to generate the data output signal.

10. A method of providing a data output signal, comprising:

altering characteristics of a temperature-dependent voltage generator by adjusting a threshold voltage of a floating-gate field effect transistor, wherein an output of the temperature-dependent voltage generator is a voltage signal having a direct proportionality to an ambient temperature;

comparing the output of the temperature-dependent voltage generator to a reference voltage;

generating a first temperature-dependent control signal in response to the comparison of the reference voltage and the output of the temperature-dependent voltage generator, wherein the first temperature-dependent control signal has a first logic level when the output of the temperature-dependent voltage generator is greater than the reference voltage and wherein the first temperature-dependent control signal has a second logic level when the output of the temperature-dependent voltage generator is less than the reference voltage;

generating a first output signal at a first output buffer stage in response to a data signal;

generating a second output signal at a second output buffer stage in response to the data signal when the first temperature-dependent control signal has the first logic level;

placing the second output buffer stage in a high-impedance state when the first temperature-dependent control signal has the second logic level; and

adding the first output signal and the second output signal to generate the data output signal.

11. The method of claim 10, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the output of the temperature-dependent voltage generator further comprises generating the first temperature-dependent control signal to have the first logic level when the output of the temperature-dependent voltage generator is equal to the reference voltage.

12. The method of claim 10, further comprising:

amplifying the output of the temperature-dependent voltage generator prior to comparing it to the reference voltage.

13. The method of claim 10, further comprising:

altering characteristics of a second temperature-dependent voltage generator by adjusting a threshold voltage of a second floating-gate field effect transistor, wherein an output of the second temperature-dependent voltage generator is a voltage signal having a direct proportionality to the ambient temperature;

comparing the output of the second temperature-dependent voltage generator to the reference voltage;

generating a second temperature-dependent control signal in response to the comparison of the reference voltage and the output of the second temperature-dependent voltage generator, wherein the second temperature-dependent control signal has the first logic level when the output of the second

temperature-dependent voltage generator is greater than the reference voltage and wherein the second temperature-dependent control signal has the second logic level when the output of the second temperature-dependent voltage generator is less than the reference voltage;

generating a third output signal at a third output buffer stage in response to the data signal when the second temperature-dependent control signal has the first logic level;

placing the third output buffer stage in a high-impedance state when the second temperature-dependent control signal has the second logic level; and

adding the third output signal to the first and second output signals to generate the data output signal.

14. The method of claim 13, wherein generating the second temperature-dependent control signal in response to the comparison of the reference voltage and the output of the second temperature-dependent voltage generator further comprises generating the second temperature-dependent control signal to have the first logic level when the output of the second temperature-dependent voltage generator is equal to the reference voltage.

15. A method of providing a data output signal, comprising:

generating a first temperature-dependent voltage signal having a proportionality to an ambient temperature;

comparing the first temperature-dependent voltage signal to a reference voltage;

generating a first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal, wherein the first temperature-dependent control signal has a first logic level when the first temperature-dependent voltage signal is greater than the reference voltage and wherein the first temperature-dependent control signal

has a second logic level when the first temperature-dependent voltage signal is less than the reference voltage;

generating a first output signal at a first output buffer stage in response to a data signal;

generating a second output signal at a second output buffer stage in response to the data signal when the first temperature-dependent control signal has the first logic level;

placing the second output buffer stage in a high-impedance state when the first temperature-dependent control signal has the second logic level; and

adding the first output signal and the second output signal to generate the data output signal.

16. The method of claim 15, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal further comprises generating the first temperature-dependent control signal to have the first logic level when the first temperature-dependent voltage signal is equal to the reference voltage.

17. The method of claim 15, further comprising:

amplifying the first temperature-dependent voltage signal prior to comparing it to the reference voltage.

18. The method of claim 15, further comprising:

generating a second temperature-dependent voltage signal having a proportionality to the ambient temperature;

comparing the second temperature-dependent voltage signal to the reference voltage;

generating a second temperature-dependent control signal in response to the comparison of the reference voltage and the second temperature-dependent voltage signal, wherein the second temperature-dependent control signal has

the first logic level when the second temperature-dependent voltage signal is greater than the reference voltage and wherein the second temperature-dependent control signal has the second logic level when the second temperature-dependent voltage signal is less than the reference voltage;

generating a third output signal at a third output buffer stage in response to the data signal when the second temperature-dependent control signal has the first logic level;

placing the third output buffer stage in a high-impedance state when the second temperature-dependent control signal has the second logic level; and

adding the third output signal to the first and second output signals to generate the data output signal.

19. The method of claim 18, wherein generating the second temperature-dependent control signal in response to the comparison of the reference voltage and the second temperature-dependent voltage signal further comprises generating the second temperature-dependent control signal to have the first logic level when the second temperature-dependent voltage signal is equal to the reference voltage.

20. A method of providing a data output signal, comprising:

generating a first temperature-dependent voltage signal having an inverse proportionality to an ambient temperature;

comparing the first temperature-dependent voltage signal to a reference voltage;

generating a first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal, wherein the first temperature-dependent control signal has a first logic level when the first temperature-dependent voltage signal is less than the reference voltage and wherein the first temperature-dependent control signal has the second logic level when the first temperature-dependent voltage signal is greater than the reference voltage;

generating a first output signal at a first output buffer stage in response to a data signal;

generating a second output signal at a second output buffer stage in response to the data signal when the first temperature-dependent control signal has the first logic level;

placing the second output buffer stage in a high-impedance state when the first temperature-dependent control signal has the second logic level; and

adding the first output signal and the second output signal to generate the data output signal.

21. The method of claim 20, wherein generating the first temperature-dependent control signal in response to the comparison of the reference voltage and the first temperature-dependent voltage signal further comprises generating the first temperature-dependent control signal to have the first logic level when the first temperature-dependent voltage signal is equal to the reference voltage.

22. The method of claim 20, further comprising:

generating a second temperature-dependent voltage signal having an inverse proportionality to the ambient temperature;

comparing the second temperature-dependent voltage signal to the reference voltage;

generating a second temperature-dependent control signal in response to the comparison of the reference voltage and the second temperature-dependent voltage signal, wherein the second temperature-dependent control signal has the first logic level when the second temperature-dependent voltage signal is less than the reference voltage and wherein the second temperature-dependent control signal has the second logic level when the second temperature-dependent voltage signal is greater than the reference voltage;

generating a third output signal at a third output buffer stage in response to the data signal when the second temperature-dependent control signal has the first logic level;

placing the third output buffer stage in a high-impedance state when the second temperature-dependent control signal has the second logic level; and

adding the third output signal to the first and second output signals to generate the data output signal.

23. The method of claim 22, wherein generating the second temperature-dependent control signal in response to the comparison of the reference voltage and the second temperature-dependent voltage signal further comprises generating the second temperature-dependent control signal to have the first logic level when the second temperature-dependent voltage signal is equal to the reference voltage.

24. A memory device, comprising:

an array of memory cells;

a plurality of data lines for access to the memory cells; and

an output buffer coupled between the array of memory cells and the plurality of data lines, wherein the output buffer includes at least one output buffer circuit, comprising:

an output driver for providing two control signals representative of a data value of a memory cell;

a first output buffer stage for providing an output signal on a first one of the data lines, wherein the output signal is indicative of the data value of the memory cell;

at least one switch responsive to a temperature-dependent control signal, wherein each switch is adapted to pass the two output driver control signals when the temperature-dependent control signal has a first logic

value and to pass two complementary control signals when the temperature-dependent control signal has a second logic value;

at least one second output buffer stage having an output coupled to the first one of the data lines, each second output buffer stage coupled to one of the switches in a one-to-one relationship for receiving its output control signals, wherein each second output buffer stage is adapted to provide an output signal on its output indicative of the data value of the memory cell when the temperature-dependent control signal has the first logic value and to present a high-impedance state on its output when the temperature-dependent control signal has the second logic value;

for each switch responsive to a temperature-dependent control signal, a comparator having a first input for receiving a reference voltage and a second input for receiving a temperature-dependent voltage signal, wherein each comparator is adapted for generating a temperature-dependent control signal as an input for its respective switch in response to a comparison of its temperature-dependent voltage signal and the reference voltage; and

for each comparator, a temperature-dependent voltage generator for generating the respective temperature-dependent voltage signal as a function of an ambient temperature.

25. The memory device of claim 24, wherein at least one temperature-dependent voltage generator comprises:

a first pFET having a source, drain, gate and body, wherein its source and body are coupled to a first node for receiving a second reference voltage and its gate is coupled to its drain;

a second pFET having a source, drain, gate and body, wherein its body is coupled to its source and its gate and drain are coupled to a second node for receiving a ground potential;

a resistive element coupled between the drain of the first pFET and the source of the second pFET; and

an output node coupled between the drain of the first pFET and the second input of its respective comparator.

26. The memory device of claim 25, further comprising an amplifier stage coupled between the output node of a temperature-dependent voltage generator and the second input of its respective comparator.

27. The memory device of claim 24, wherein at least one temperature-dependent voltage generator comprises:

an output node coupled to the second input of its respective comparator;

a pFET having a source, drain and gate, wherein its gate and drain are coupled to the output node and its source is coupled to a node for receiving a second reference voltage; and

a resistive element coupled between the output node and a node for receiving a ground potential.

28. The memory device of claim 27, further comprising an amplifier stage coupled between the output node of a temperature-dependent voltage generator and the second input of its respective comparator.

29. The memory device of claim 24, wherein at least one temperature-dependent voltage generator comprises:

an output node coupled to the second input of its respective comparator;

a resistive element coupled between the output node and a node for receiving a second reference voltage;

an nFET having a source, drain and gate, wherein its gate and drain are coupled to the output node and its source is coupled to a node for receiving a ground potential.

30. The memory device of claim 29, further comprising an amplifier stage coupled between the output node of a temperature-dependent voltage generator and the second input of its respective comparator.

31. The memory device of claim 24, wherein each temperature-dependent voltage generator is programmable.

32. The memory device of claim 31, wherein each temperature-dependent voltage generator comprises a programmable temperature-sensitive element.

33. The memory device of claim 32, wherein each programmable temperature-sensitive element is a floating-gate FET.

34. The memory device of claim 24, wherein at least one temperature-dependent voltage generator comprises:

an output node coupled to the second input of its respective comparator;

a resistive element coupled between the output node and a node for receiving a second reference voltage;

a first nFET having a source, drain and gate, wherein its drain coupled to the output node;

a floating-gate FET having a source, drain, gate and floating gate, wherein its drain is coupled to the source of the first nFET; and

a second nFET having a source, drain and gate, wherein its drain is coupled to the source of the floating-gate FET and its source is coupled to a node for receiving a ground potential;

wherein the source, drain and gate of the floating-gate FET are coupled to receive programming voltages capable of adding and removing charge from its floating gate; and

wherein the gates of the first and second nFETs are coupled to receive control signals for selectively deactivating the first and second nFETs while the programming voltages are applied to the floating-gate FET.

35. The memory device of claim 27, further comprising an amplifier stage coupled between the output node of a temperature-dependent voltage generator and the second input of its respective comparator.